Conservation Science Institute

Exploration, Environmental Problem Solving, and Education

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ALAMEDA POINT
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12 May 1995

Mr. George Kikugawa
Engineering Field Activity, West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-5006

SUBJECT: COMMENTS ON THE WORK PLAN FOR THE TERRESTRIAL SCOPING ASSESSMENT AND THREATENED AND ENDANGERED SPECIES SURVEY AT NAVAL AIR STATION ALAMEDA

Dear Mr. Kikugawa:

This letter represents Conservation Science Institute's comments on the Terrestrial Scoping Assessment and Threatened and Endangered Species Survey at Naval Air Station Alameda. We at Conservation Science Institute recognize the improvements made in language and document clarity since last year's ecological assessment fiasco (CSI 1994), nevertheless we will limit our discussion of this document to constructive criticisms and suggestions. In general, CSI makes the following comments:

Primary Comments

- The study objectives are not clearly defined. If the only objective is to "characterize" then the study is fatally flawed from the beginning. Identify your questions and identify your working hypotheses. Finally, what will the resulting information tell us?

- I found no science whatsoever in this work plan; no specific quantitative methodologies are proposed for the surveys. Established methodologies for such scientific surveys can be found in the literature. Work plans are the appropriate place to specify these methodologies and cite the appropriate literature. It appears that the authors are not familiar with the types of surveys addressed in the work plan.

Additional Comments

- Important guidelines and documents are not cited and referenced (eg. paragraph 1).

- The reference section is incomplete. A number of manuals and field guides have been listed but not included in the reference section.

- Potentially complete exposure pathways include suspected routes of chemical exposure as well as "known routes of chemical exposure", unless you stop using the word 'potentially'. Please fix this in section 2.3.

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- The last sentence of section 2.2 does not indicate how the researchers will address complex mixtures of chemicals during the ecological risk assessment process. Why?

- The explanation and logic is incomplete and somewhat backwards or circular in the first sentence of the third paragraph of section 2.3. One needs information on magnitude, duration, and frequency of exposure in order to study exposure pathways.

- In section 3.3 the authors imply that trap density is the only component of a mouse survey design. Do they believe this? Also, please use some cotton or poly fiber in the traps to prevent thermal stress.

- Vague buzz-phrases that have no substantive meaning are used throughout the text. These phrases have no meaning because they are not defined and because specific methodologies have not been included. Examples follow:

  pg. 1: "The objective of the scoping assessment is to characterize....."

  pg. 2: "The terrestrial scoping assessment will characterize habitats and biota...."

  variants of the vague word 'characterize' are used at least 9 times in the first 5 pages

  pg. 9 "Field surveys are intended to address uncertainties associated with ...."

  pg. 9 "Data from the threatened and endangered species survey will be considered...."

  pg. 10 "PRC will closely survey vegetation transition zones....". What does that mean?

  pg. 11 "A PRC field biologist will perform a general field survey...". What's that?

  pg. 11 "During the field survey, a visual search method will be used...". What method?

This is useful consulting language for the very reason that it has no specific meaning.

- Please note that a harbor seal feeding area is located just to the west of NAS Alameda (Harvey and Torok 1994), a report on pollutants and harbor seals will soon be final (Kopek et al. 1995), and harbor seals are often observed around NAS Alameda (L. Feeney personal communication).

Recommendations

- Please explain what you expect the data to tell you. For example, what will you conclude if you do not find a species that might be expected to be there? Conversely, what will you conclude if you do find a species? How do questions of population location and apparent density fit into your conclusions? What are your working hypotheses in this study? These are important questions to address in a work plan because studies must be built on clearly defined questions, especially ecological studies.

- The lack of specified methodologies in the work plan suggests that the authors are not familiar with the kind of survey work that they are proposing. We recommend that the Navy find and hire groups that know how to perform each type of survey. These groups are not difficult to find. In fact, you list several in section 3.1.

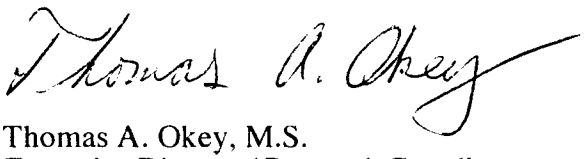
- Chemical partitioning and tissue concentrations in biota is more reliably estimated by direct measurements of tissue residues in addition to fugacity modeling (section 1, paragraph 4, #4). We strongly urge you to directly measure tissue concentrations, as Mr. Bill Peters has suggested.

- The Navy, PRC, and other contractors must address complex mixtures of chemicals, not just single chemicals, during the overall ecological risk assessment process.

Unfortunately, this work plan is not adequate because of its lack of clear purpose, specificity, rigor, and for the above reasons. Perhaps, all parties would be better off if the Navy found contractors who conduct rigorous, unbiased, and self-critical investigations and who are specialists in the specific types of work that is needed. I am still optimistic that the U.S. Navy will uphold its honorable and legal responsibilities to defend and protect U.S. Citizens and the environment from chemical contamination associated with its operations.

Please respond to these comments. If you have any questions regarding these comments or suggestions, please do not hesitate to call me at (510) 814-9469.

Sincerely,



Thomas A. Okey, M.S.
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Literature Cited

CSI. 1994. Review of draft Ecological Assessment of Naval Air Station Alameda (17 February and 1 July 1994). Conservation Science Institute, Alameda, CA, (510) 814-9469.

Harvey, J.T., and M.L. Torok. 1994. Movements, dive behaviors, and food habits of harbor seals (Phoca vitulina richardsi) in San Francisco Bay, California. Department of Water Resources, Sacramento, B-58227.

Kopek, D., J. Harvey, and M. Torok. 1995. Toxic Pollutants, Health Indices, and Population dynamics of Harbor Seals in San Francisco Bay. Technical Report, Moss Landing Marine Laboratories, Moss Landing, CA.